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10/517,780	12/28/2004	Tomoyuki Asano	262954US6PCT	7690
22850	7590	07/09/2010		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER NILFOROUSH, MOHAMMAD A	
			ART UNIT 3685	PAPER NUMBER
			NOTIFICATION DATE 07/09/2010	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/517,780

**Applicant(s)**

ASANO, TOMOYUKI

**Examiner**

Mohammad A. Nilfroush

**Art Unit**

3685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 March 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 37-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 37-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SI/200)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 4/21/2010

**DETAILED ACTION**

***Acknowledgements***

1. The amendment filed 25 March 2010 is acknowledged.
2. Claims 37-45 are pending.
3. Claims 37-45 have been examined.
4. This Office action is given Paper No. 20100619 for reference purposes only.

***Response to Amendment/Arguments***

5. Applicant's arguments filed 25 March 2010 regarding the rejection of claims 37-42 under 35 USC §112, first and second paragraphs have been fully considered but they are not persuasive. Applicant states that "...multiple different signatures are not generated from only a single secret key and message, as alleged in the Office Action. The language in the claims is open-ended and merely identifies a plurality of different signature data elements are generated from a secret key data element and a message data element. The language does not preclude the use of, e.g., a random number as noted above and described in the specification."
6. However, although the language of the claim does not preclude the use of a random number in addition to the recited elements to generate the signature, the claim is broad enough to include generating a plurality of different signatures using only a single message and key. The scope of the claim is broader than what is supported by the specification, as the specification does not describe a plurality of different signatures being created using only a single secret key and message. The specification states that

the signature elements are generated from a message, a random number, and a secret key (See, for example, Specification Paragraph **167-174**).

7. Applicant's remaining arguments with respect to claims 37-45 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 37-45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 37, 39, and 41 recite "...generating...a plurality of different signature data elements from a secret key data element and a message data element; generating...a plurality of different identification data elements, each of the plurality of different identification data elements including a generated signature element and the message data element used in the generating of the generated signature data elements..." Thus, under the broadest reasonable interpretation of the claim, this limitation is broad enough to include generating a plurality of different signature data elements from only a secret key data element and a message data element. However, the scope of the claim is broader than what is

supported by the specification, as the specification does not describe a plurality of different signatures being created using only a single secret key and message. The specification states that the signature elements are generated from a message, a random number, and a secret key (See, for example, Specification Paragraph **167-174**).

Claims 38, 40, and 42-45 are also rejected as each depends on claims 37, 39, and 41 respectively.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 37-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

12. Claims 37, 39, and 41 recite "...generating...a plurality of different signature data elements from a secret key and a message data element..." This limitation is broad enough to include generating a plurality of different signature data elements from the same secret key and message data element. A digital signature is a function of the data being signed and the key used to sign it (An Introduction to Cryptography, Page **19**, Figure **1-6**). Thus, it is unclear to one of ordinary skill how multiple different signatures can be produced when both the data being signed, and a key used to generate the signature, are the same.

Claims 38, 40, and 42-45 are also rejected as each depends on claims 37, 39, and 41 respectively.

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 37-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asano, et al. (European Patent Application Publication No. EP 1069567, hereinafter "Asano") in view of Rabin, et al. (US Patent No. 6,697,948, hereinafter "Rabin").

15. Regarding claims 37, 39 and 41, Asano discloses a method of a media verification system for identifying recording media, comprising:

- generating a plurality of different signature data from secret key data and message data using a data processing device of the media verification system (Asano Paragraphs **37**, and **115**);
- generating a plurality of different identification data using the data processing device, each of the plurality of different identification data including a generated signature data and a message data used in the generating of the generated signature data (Asano Paragraphs **37**, and **115**);
- assigning one of the plurality of generated identification data to each of a plurality of different recording media (Asano Paragraphs **27-28**, **37**, **43**, and **115**);

- recording one of the plurality of generated identification data to an assigned recording media using a media writing device of the media verification system (Asano Paragraph **28, 39, 43, and 115**);
- generating verification data from the generated signature data of the identification data recorded on the assigned recording media using a public key (Asano Paragraphs **35, 46, 51-60 and 115**);
- comparing the verification data to the message data of the identification data recorded on the assigned recording media using the data processing device and verifying the identification data if the verification data is the same as the message data of the identification data recorded on the assigned recording media (Asano Paragraphs **55-60**);
- writing an encrypted content to the assigned recording media using a media recording device if the assigned recording media is verified in the comparing, wherein the media recording device is configured to inhibit writing the encrypted content to a recording media having an unverified identification data or no identification data recorded thereon (Asano Paragraphs **61, 72, 81-82, 90-92, and 115**; Claim **1**).

Asano does not specifically disclose storing the plurality of different identification data in an electronic memory of the media verification system. Asano further does not specifically disclose that the plurality of different signature elements are produced using the same message data, and that the signature data element is one of the signature elements produced using the same message data.

Rabin discloses that a plurality of signature elements (SIGN\_TS(HASH\_INST\_SW)) are generated from constant data (NAME\_SW incorporated into HASH\_INST\_SW) and a key, and that each of the signature elements is included in a tag along with the message data to form an identifier (Rabin Figure **3A**; **32:5-40**; **33:27-60**; **35:66-36:6**). Rabin also discloses that the unique identifiers are stored on a server (Rabin **6:7-28**; **9:37-50**; **14:60-15:31**; **18:61-19:40**; **34:66-35:5**; **37:46-65**; **43:13-36**; **49:33-50:21**; **56:24-50**).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Asano to include to include storing the unique identification information on a server and to use a plurality of signature elements generated from a single message in creating identifiers as disclosed in Rabin in order to be able to monitor content usage and prevent the usage of content in a manner not authorized by the vendor (Rabin **2:60-3:28**).

16. Regarding claims 38, 40, and 42, Asano discloses:

- generating an identification revocation list, wherein the identification revocation list includes identification data (Asano Paragraphs **41-42**);
- recording the identification revocation list to the assigned recording media using the media writing device, wherein the media recording device is further configured to inhibit writing the encrypted content to the assigned recording media if the identification data recorded on the assigned recording media is included in the identification revocation list (Asano Paragraphs **43**, **53-55**).



Asano does not specifically disclose that the identification data on the revocation list corresponds to an unauthorized recording media.

Rabin discloses placing identification data corresponding to unauthorized instances on a revocation list (Rabin **48:9-17**; **56:65-57:7**).

17. Regarding claims 43, 44, and 45, Rabin discloses that the different signature data elements are generated from the secret key data element, the message data element and a different integer selected from a set having a number of integers equal to a number of the different recording media (Rabin Figure **3A**; **3:66-4:9**; **32:5-40**; **33:27-60**; **35:66-36:6**).

### ***Conclusion***

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad A. Nilforoush whose telephone number is (571)270-5298. The examiner can normally be reached on Monday-Thursday 10 am - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Calvin Hewitt can be reached on (571)272-6709. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. A. N./  
Examiner, Art Unit 3685

/Calvin L Hewitt II/  
Supervisory Patent Examiner, Art Unit 3685